1. A method for evaluating or educating a user comprising the steps of:

(a) generating a plurality of parallel health state networks;

(b) generating at least one first Bayesian network which describes each of the plurality of parallel health state networks;

(c) generating at least one second Bayesian network which describes rates of progression within and/or between said plurality of parallel health state networks, and describes task factors that affect the rates of progression;

(d) generating at least one third Bayesian network which supports reveal structures to limit display of patient test data to patient test data specifically requested by the user;

(e) generating at least one fourth Bayesian network which supports plan critiques of queries of and treatment prescribed by the user;

(f) scripting a knowledge base from the at least one first Bayesian network and the at least one second Bayesian network;

(g) instantiating a model patient, at least in part, from the scripted knowledge base;

(h) receiving one of a course of action and a query for a specific medical finding concerning the model patient from the user responsive to the instantiated model patient;

(i) displaying, if the query is received, the specific medical finding to the user based at least in part on the at least one third Bayesian network, and repeating step (h);

(j) evolving the model patient in accordance with the plurality of parallel health state networks and responsive to the received course of action;

(k) repeating the steps (h) through (j) until the user has completed treatment of the model patient;

(l) generating an optimum combination of treatment and queries based, at least in part, on the at least one fourth Bayesian network and the instantiated model patient; and

(m) evaluating the query and the treatment by the user in comparison to the generated optimum combination of treatment and queries.

2. The method according to claim 1, wherein said plurality of parallel health state networks describe at least one of a plurality of primary networks defining disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the plurality of primary networks, and a plurality of tertiary networks defining at least one of causal probabilistic medical complications attributed to at least one

stage in the primary network and medical complications attributed to management of the at least one stage.

3. A computer readable medium including instructions being executed by a computer, the instructions instructing the computer to execute an educational or testing system for physicians, the instructions including:

(a) accessing at least one first belief network, which describes a plurality of parallel health state networks;

(b) scripting a knowledge base, at least in part, from the at least one first belief network;

(c) instantiating a model patient, at least in part, from the scripted knowledge base.

4. The computer readable medium according to claim 3, wherein the plurality of parallel health state networks describe at least one of a plurality of primary networks defining disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the plurality of primary networks, and a plurality of tertiary networks defining at least one of causal probabilistic medical complications attributed to at least one stage in the primary network and medical complications attributed to management of the at least one stage.

5. The computer readable medium according to claim 3, wherein the instructions further comprise:

(d) accessing at least one second belief network, which describes rates of progression within and/or between the plurality of parallel health state networks, and describes task factors that affect the rates of progression.

6. The computer readable medium according to claim 5, wherein the instructions further comprise:

(e) accessing at least one third belief network, which supports reveal structures to limit display of patient test data to patient test data specifically requested by the user.

7. The computer readable medium according to claim 6, wherein the instructions further comprise:

(f) accessing at least one fourth belief network which supports plan critiques of queries of and treatment prescribed by the user.

8. The computer readable medium according to claim 3, wherein the scripting step (b) includes scripting the knowledge base, at least in part, from the at least one second belief network.

9. The computer readable medium according to claim 6, wherein the instructions further comprise:

(g) receiving one of a course of action and a query for a specific medical finding concerning the model patient from the user responsive to the instantiated model patient; and

(h) displaying, if the query is received, the specific medical finding to the user based at least in part on the at least one third belief network, and repeating the step (g).

10. The computer readable medium according to claim 9, wherein the instructions further comprise:

(i) evolving the model patient in accordance with the plurality of parallel health state networks and responsive to the received course of action.

11. The computer readable medium according to claim 9, wherein the instructions further comprise:

(j) repeating the steps (g) through (i) until the user has completed treatment of the model patient.

12. The computer readable medium according to claim 11, wherein instructions further comprise:

(k) generating an optimum combination of treatment and queries based on the at least one fourth belief network and the instantiated model patient; and

(l) evaluating the query and the treatment by the user in comparison to the generated optimum combination of treatment and queries.

13. A system for evaluating or educating a user, comprising: means for scripting a knowledge base from at least one of at least one first belief network and at least one second belief network; and

means for instantiating a model patient, at least in part, from the scripted knowledge base.

14. The system according to claim 13, further comprising:

means for receiving one of a course of action and a query for a specific medical finding concerning the model patient from the user responsive to the instantiated model patient; and

means for displaying, if the query is received, the specific medical finding to the user based, at least in part, on at least one third belief network, and activating said receiving means.

15. The system according to claim 14, further comprising:
means for evolving the model patient in accordance with the plurality of parallel health state networks and responsive to the received course of action.

16. The system according to claim 15, further comprising:
means for communicating with said receiving means, said displaying means, and said evolving means until the user has completed treatment of the model patient;

means for generating an optimum combination of treatment and queries based on at least one fourth belief network and the instantiated model patient; and

means for evaluating the query and the treatment by the user in comparison to the generated optimum combination of treatment and queries.

17. The system according to claim 13, further comprising:
means for generating the plurality of parallel health state networks describing at least one of a plurality of primary networks defining disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the plurality of primary networks, and a plurality of tertiary networks defining at least one of causal probabilistic

medical complications attributed to at least one stage in the primary network and medical complications attributed to management of the at least one stage.

18. The system according to claim 15, further comprising: means for generating the at least one first belief network describing each of the plurality of parallel health state networks.

19. The system according to claim 15, further comprising: means for generating the at least one second belief network describing rates of progression within and/or between said plurality of parallel health state networks, and describes task factors that affect the rates of progression.

20. The system according to claim 15, further comprising: means for generating the at least one third belief network supporting reveal structures to limit display of patient data to patient data specifically requested by the user.

21. The system according to claim 15, further comprising: means for generating the at least one fourth belief network supporting plan critiques of queries and treatment prescribed by the user.

22. An expert system comprising:

a processor;

a computer-readable medium storing instructions executable by said processor, said instructions including:

(a) accessing a plurality of parallel health state networks describing at least one of a plurality of primary networks defining disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the plurality of primary networks, and a plurality of tertiary networks defining at least one of causal probabilistic medical complications attributed to at least one stage in the primary network and medical complications attributed to management of the at least one stage;

(b) accessing at least one first belief network which describes each of the plurality of parallel health state networks;

(c) accessing at least one second belief network which describes rates of progression within and/or between said plurality of parallel health state networks, and describes task factors that affect the rates of progression;

(d) accessing at least one third belief network which supports reveal structures to limit display of patient test data to patient test data specifically requested by the user;

(e) accessing at least one fourth belief network which supports plan critiques of queries of and treatment prescribed by the user;

(f) receiving patient data for an actual patient by user input;

(g) instantiating a virtual patient having character-istics consistent with the received patient data and based, at least in part, on the at least one first belief network and the at least one second belief network;

(h) generating one of a query for a specific medical finding concerning the actual patient, and a course of action responsive to at least one health state of a plurality of health states of the virtual patient corresponding to at least part of the received patient data;

(i) receiving the specific medical finding from the user, if a query therefor is generated; and

(j) evolving the virtual patient in accordance with at least one of the at least one first belief network and the at least one second belief network, and responsive to at least one of the received specific medical finding and the generated course of action.

23. The expert system according to claim 21, wherein the instructions further comprise:

(k) repeating the instructions (h) through (j) until the user has dispensed treatment of the actual patient based, at least in part, on the generating course of action.

24. The expert system according to claim 23, wherein the instructions further comprise:

(l) storing the evolved virtual patient for subsequent access by the user;

(m) repeating the instructions (h) through (l) upon each said subsequent access by the user at least until the treatment of the actual patient is completed.

25. A system for educating or evaluating a user comprising:

a model patient generator including a knowledge base scripted from at least one of at least one first causal probability network, which describes a plurality of parallel health state networks, and at least one second causal probability network, which describes at least one rate of progression within and/or between said plurality of parallel health state networks, and which describes at least one task factor that affects the at least one rate of progression.

26. The system according to claim 25, wherein said patient generator instantiating, upon user input, a model patient in a whiteboard, at least in part, from said scripted knowledge base.

27. The system according to claim 26, wherein said patient generator receiving one of a course of action and a query for a specific medical finding concerning the model patient from the user responsive to the instantiated model patient, the whiteboard displaying, if the query is received, the specific medical finding to the user based, at least in part, on at least one third belief network, which describes at least one patient health state reveal structure, the whiteboard evolving the model patient in accordance with the plurality of parallel health state networks and responsive to the received course of action.

28. A system communicatable with a computer network, comprising:

a server communicatable with a user via the computer network, said server being in communication with a processor and a computer-readable medium storing instructions executable by said processor, said instructions including:

(a) accessing a plurality of parallel health state networks describing at least one of a plurality of primary networks defining

disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the plurality of primary networks, and a plurality of tertiary networks defining at least one of causal probabilistic medical complications attributed to at least one stage in the primary network and medical complications attributed to management of the at least one stage;

(b) accessing at least one first belief network which describes each of the plurality of parallel health state networks;

(c) accessing at least one second belief network which describes rates of progression within and/or between said plurality of parallel health state networks, and to describe task factors that affect the rates of progression;

(d) accessing at least one third belief network which supports plan critiques of queries of and treatment prescribed by the user;

(e) receiving patient data for an actual patient by user input;

(f) instantiating a virtual patient having character-istics consistent with the received patient data and based, at least in part, on the at least one first belief network and the at least one second belief network;

(g) generating one of a query to the user for a specific medical finding concerning the actual patient, and a course of

action based, at least in part on the virtual patient and the at least one third belief network;

(h) receiving the specific medical finding from the user responsive to the generated query; and

(i) evolving the virtual patient in accordance with at least one of the at least one first belief network and the at least one second belief network, and responsive to the received specific medical finding.

29. The expert system according to claim 28, wherein the instructions further comprise:

(j) repeating the instructions (g) through (i) until the user has dispensed treatment of the actual patient based on the generating course of action; and

(k) storing the evolved virtual patient for subsequent access by the user.

30. The expert system according to claim 29, wherein the instruction further comprise:

(1) repeating the instructions (i) through (k) upon each said subsequent access by the user at least until the treatment of the actual patient is completed.

31. A system communicatable with a computer network, comprising:

a server communicatable with a user via the computer network, said server being in communication with a processor and a computer-readable medium storing instructions executable by said processor, said instructions including:

(a) accessing a plurality of parallel health state networks describing at least one of a plurality of primary networks defining disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the plurality of primary networks, and a plurality of tertiary networks defining at least one of causal probabilistic medical complications attributed to at least one stage in the primary network and medical complications attributed to management of the at least one stage;

(b) accessing at least one first belief network which describes each of the plurality of parallel health state networks;

(c) accessing at least one second belief network which describes rates of progression within and/or between said plurality of parallel health state networks, and to describe task factors that affect the rates of progression;

(d) accessing at least one third belief network which support reveal structures to limit display of patient test data to patient test data specifically requested by the user;

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(e) accessing at least one fourth belief network which supports plan critiques of queries of and treatment prescribed by the user;

(f) scripting a knowledge base from the at least one first belief network and the at least one second belief network;

(g) instantiating a model patient based, at least in part, from the scripted knowledge base;

(h) receiving one of a course of action and a query for a specific medical finding concerning the model patient from the user responsive to the instantiated model patient;

(i) displaying, if the query is received, the specific medical finding to the user based at least in part on the at least one third belief network, and repeating the instruction (h); and

(j) evolving the model patient in accordance with at least one of the at least one first belief network and the at least one second belief network and responsive to the received course of action.

32. The system according to claim 31, wherein the instructions further comprise:

(k) repeating the instructions (h) through (j) until the user has completed treatment of the model patient.

33. The system according to claim 32, wherein the instruction further comprise:

(1) generating an optimum combination of treatment and queries based on the at least one fourth belief network and the instantiated model patient; and

(m) evaluating the query and the treatment by the user in comparison to the generated optimum combination of treatment and queries.

34. A knowledge base module for an educational or testing system or an expert system, comprising at least one of:

at least one first causal probability network, which describes each parallel health state network of a plurality of parallel health state networks;

at least one second causal probability network, which describes at least one rate of progression within and/or between said plurality of parallel health state networks, and which describes at least one task factor that affects the at least one rate of progression; and

at least one third causal probability network, which describes plan critiques including peer-accepted courses of action for addressing said plurality of parallel health state networks.

35. A computer network appliance comprising:

a thin client programmably connected via a computer network to a single web hosting facility, the single web hosting facility including a server communicatable with a user via the computer network, said server being in communication with a processor and a computer-readable medium storing instructions executable by said processor, said instructions including:

(a) accessing a plurality of parallel health state networks describing at least one of a plurality of primary networks defining disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the plurality of primary networks, and a plurality of tertiary networks defining at least one of causal probabilistic medical complications attributed to at least one stage in the primary network and medical complications attributed to management of the at least one stage;

(b) accessing at least one first belief network which describes each of the plurality of parallel health state networks;

(c) accessing at least one second belief network, which describes rates of progression within and/or between said plurality of parallel health state networks, and describes task factors that affect the rates of progression;

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(d) accessing at least one third belief network, which supports reveal structures to limit display of patient test data to patient test data specifically requested by the user;

(e) accessing at least one fourth belief network which supports plan critiques of queries of and treatment prescribed by the user;

(f) scripting a knowledge base from at least one of the at least one first belief network and the at least one second belief network;

(g) instantiating a model patient, at least in part, from the scripted knowledge base;

(h) receiving one of a course of action and a query for a specific medical finding concerning the model patient from the user responsive to the instantiated model patient;

(i) displaying, if the query is received, the specific medical finding to the user based at least in part on the at least one third belief network, and repeating step (h); and

(j) evolving the model patient in accordance with the plurality of parallel health state networks and responsive to the received course of action.

36. The computer network appliance according to claim 35, wherein said instructions further comprise:

(k) repeating the steps (h) through (j) until the user has completed treatment of the model patient.

37. The computer network appliance according to claim 35, wherein said instructions further comprise:

(l) generating an optimum combination of treatment and queries based on the at least one fourth belief network and the instantiated model patient; and

(m) evaluating the query and the treatment by the user in comparison to the generated optimum combination of treatment and queries.

38. A computer network appliance comprising:

a thin client programmably connected via a computer network to a single web hosting facility, the single web hosting facility including a server communicatable with a user via the computer network, said server being in communication with a processor and a computer-readable medium storing instructions executable by said precessor, said instructions including:

(a) accessing a plurality of parallel health state networks describing at least one of a plurality of primary networks defining disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the

plurality of primary networks, and a plurality of tertiary networks
defining at least one of causal probabilistic medical complications
attributed to at least one stage in the primary network and medical
complications attributed to management of the at least one stage;

(b) accessing at least one first belief network, which
describes each of the plurality of parallel health state networks;

(c) accessing at least one second belief network, which
describes rates of progression within and/or between said plurality
of parallel health state networks, and describes task factors that
affect the rates of progression;

(e) accessing at least one third belief network, which
supports plan critiques of queries of and treatment prescribed by
the user;

(f) receiving patient data for an actual patient by user
input;

(g) instantiating a virtual patient having character-istics
consistent with the received patient data and based, at least in
part, on at least one of the at least one first belief network and
the at least one second belief network;

(h) generating one of a query to the user for a specific
medical finding concerning the actual patient, and a course of
action based, at least in part on the virtual patient and the at
least one third belief network;

(i) receiving the specific medical finding from the user responsive to the generated query; and

(j) evolving the virtual patient in accordance with at least one of the at least one first belief network and the at least one second belief network, and responsive to the received specific medical finding.

39. The expert system according to claim 38, wherein the instructions further comprise:

(k) repeating the instructions (h) through (j) until the user has dispensed treatment of the actual patient based on the generating course of action; and

(l) storing the evolved virtual patient for subsequent access by the user.

40. The expert system according to claim 39, wherein the instruction further comprise:

(m) repeating the instructions (h) through (l) upon each said subsequent access by the user at least until the treatment of the actual patient is completed.

41. A system communicatable with a computer network, comprising:

a server communicatable with a user via the computer network, said server being in communication with a processor and a computer-readable medium storing instructions executable by said processor, said instructions including:

(a) accessing a plurality of parallel health state networks describing at least one of a plurality of primary networks defining disease evolutions, a plurality of secondary networks defining risk factors affecting progression through a primary network of the plurality of primary networks, and a plurality of tertiary networks defining at least one of causal probabilistic medical complications attributed to at least one stage in the primary network and medical complications attributed to management of the at least one stage;

(b) accessing at least one first belief network, which describes each of the plurality of parallel health state networks;

(c) accessing at least one second belief network, which describes rates of progression within and/or between said plurality of parallel health state networks, and describes task factors that affect the rates of progression;

(d) accessing at least one third belief network, which support reveal structures to limit display of patient test data to patient test data specifically requested by the user;

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(e) accessing at least one fourth belief network, which supports plan critiques of queries of and treatment prescribed by the user;

(f) scripting a knowledge base from at least one of the at least one first belief network and the at least one second belief network;

(g) instantiating a model patient based, at least in part, from the scripted knowledge base;

(h) receiving one of a course of action and a query for a specific medical finding concerning the model patient from the user responsive to the instantiated model patient;

(i) displaying, if the query is received, the specific medical finding to the user based at least in part on the at least one third belief network, and repeating the instruction (h); and

(j) evolving the model patient in accordance with at least one of the at least one first belief network and the at least one second belief network and responsive to the received course of action.

42. The system according to claim 41, wherein said instructions further comprise:

(k) repeating the instruction (h) through (j) until the user has dispensed treatment of the actual patient based on the generated course of action; and

(l) storing the evolved virtual patient for subsequent access.

43. The system according to claim 42, wherein said instructions further comprise:

(m) repeating the instructions (h) through (l) upon each said subsequent access at least until the treatment of the actual patient is completed.

44. A method for educating or evaluating a user, comprising the steps of:

instantiating a virtual patient for display to the user, the virtual patient including a plurality of health states;

receiving from the user at least one of a query for a medical finding concerning the instantiated virtual patient and a course of action; and one of:

generating, responsive to the received query, a specific medical finding at least in part from a first causal probability network defining a health state reveal structure corresponding to the instantiated virtual patient,

generating, responsive to the received query, an indication of an inappropriate query, based, at least in part, on a second causal probability network defining a medical practice management plan, and

generating, responsive to the received course of action, an indication of an inappropriate course of action, based, at least in part, on the second causal probability network.

45. The method according to claim 42, wherein the medical practice management plan includes healthcare provider approved medical finding queries.